

WHAT IS CLAIMED IS:

1. A delivery system comprising a homogenous, thermoreversible gel film, wherein said gel film comprises: (i) a film forming amount of a water soluble thermoreversible alginate and optionally at least one of a plasticizer, a second film former, a bulking agent, and a pH controlling agent; and (ii) an active substance.
2. The delivery system of claim 1, wherein said active substance is at least one of an oral care agent, a breath freshening agent, a pharmaceutical agent, a nutraceutical agent, a salivary stimulant agent, cosmetic ingredient, agricultural active, a vitamin, a mineral, a coloring agent, a sweetener, a flavorant, a fragrance or a food.
3. The delivery system of claim 1, wherein said alginate is present in an amount of at least 0.25% by dry weight of the gel film.
4. The delivery system of claim 1, wherein said alginate is present in an amount of 0.25% to 25% by dry weight of the gel film.
5. The delivery system of claim 1, wherein said alginate is present in an amount of at least 10% of the total dry weight of film formers in the gel film.
6. The delivery system of claim 1, wherein said alginate is present in an amount of at least 40% of the total dry weight of film formers in the gel film.

7. The delivery system of claim 1, wherein said alginate is present in an amount of at least 60% of the total dry weight of film formers in the gel film.
8. The delivery system of claim 1, wherein said alginate is present in an amount of at least 80% of the total dry weight of film formers in the gel film.
9. The delivery system of claim 1, wherein said alginate is the only film former present in the gel film.
10. The delivery system of claim 1, wherein said second film former is selected from the group consisting of starch, starch derivative, starch hydrozylate, cellulose gums, kappa carrageenan, iota carrageenan, polymannan gums, dextrans, pullulan, gellan, pectin, alkylcellulose ethers and modified alkyl cellulose ethers.
11. The delivery system of claim 1, wherein said plasticizer is at least one member selected from the group consisting of glycerin, sorbitol, maltitol, lactitol, solubilized oil, and polyalkylene glycols; said second film former is at least one member selected from the group consisting of a starch, starch derivative, starch hydrozylate, cellulose gum, kappa carrageenan, iota carrageenan, polymannan gums, dextran, pullulan, gellan, pectin, an alkylcellulose ether and a modified alkyl cellulose ether; and said bulking agent is at least one member selected from the group consisting of microcrystalline cellulose, microcrystalline starch, starch, starch derivatives, inulin, and starch hydrozylates.

12. The delivery system of claim 1 having a break force strength of at least 2,500 grams.

13. The delivery system of claim 1 having a break force strength of at least 4,000 grams.

14. The delivery system of claim 1 having a break force strength of at least 5,000 grams.

15. The delivery system film of claim 1 having a break force strength of at least 6,000 grams.

16. A process for preparing the homogeneous gel film delivery system in any of claims 1-15 comprising the steps of:

(i) heating, hydrating, mixing, solubilizing and optionally de-aerating said alginate and optionally at least one of a plasticizer, a second film former, a bulking agent, and a pH controlling agent in an apparatus providing sufficient shear, temperature and residence time to form a homogeneous molten composition, wherein said temperature is at or above the solubilizing temperature of said composition;

(ii) adding an effective amount of an active substance either prior to or after formation of the molten composition; and

(iii) cooling said molten composition containing said active substance at or below its gelling temperature to form said gel films containing said active substance.

17. The process of claim 16, wherein said active substance is at least one of an oral care agent, a breath freshening agent, a pharmaceutical agent, a nutraceutical agent, a salivary stimulant agent, a vitamin, a mineral, a cosmetic ingredient, an agricultural active, a coloring agent, a sweetener, a flavorant, a fragrance, a food.

18. The process of claim 16, wherein said apparatus is a Ross mixer, extruder, Stephan processor, jet cooker or fluid mixing apparatus.

19. The delivery system of claim 1 having a break force strength of at least 250 grams.

20. The delivery system of claim 1 having a break force strength of at least 1,000 grams.

21. The delivery system of claim 1, further comprising a flavorant and having a solids content of at least 50%.

22. The delivery system of claim 1, wherein said second film former is a carrageenan having a viscosity of less than 10 cps at 75 °C when measured in a 0.10 molar aqueous

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sodium chloride solution containing 1.5% by weight of said carrageenan based on the weight of all components in said solution.